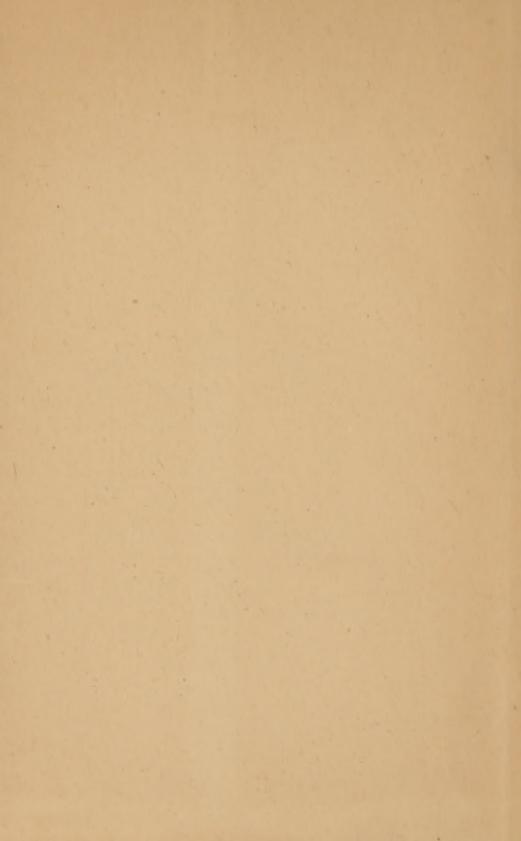
HOBBS (A.G.)

Adenoids, with a descripe
tion of new instruments xxxxx





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ADENOIDS, WITH A DESCRIPTION OF NEW INSTRUMENTS FOR THEIR EXCISION.*

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A post-pharyngeal adenoid is as truly an overgrowth of Luscka's tonsil as is a wart an overgrowth of a papilla of the epidermis. The two differ in all respects only as the corium of the skin differs from the lymphoid cashion in the pharynx whence each has its respective origin. The resemblance between them may be seen in the different degrees of consistency that each presents, due in both cases to the rapidity of growth, the age, and the peculiar condition of irritation to which either may have been subjected. These vegetations are found between and just posterior to the orifices of the Eustachian tubes. they rarely push forward enough to encroach upon the choanæ and enter these orifices. When felt with the finger, introduced through the pharynx as well as when seen with a posterior rhinoscopic mirror, the mass resembles brain tissue in its consi 'ency and in its furrowed surface. While it is a so-called hypertrophy it is but little like the hypertrophies that we encounter elsewhere, except in long existing cases, and in older subjects than it is ordinarily found. In such cases the growth is comparitively small and does not obstruct breathing to any

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great extent although it may decidedly alter phonation and cause a dead or muffled voice-tone. By common consent another name is usually applied to this particular condition viz:

—hypertrophy of the pharyngeal, third, or Luscka's tonsil. This is, however, a distinction without a real difference. It is this form of adenoid growth that in so many ways resembles a verruea.

Nothing is definitely known as to the cause of adenoid growths, unless an hereditary tendency, as a predisposing cause together with often-recurring colds as the excitant, can be regarded as a satisfactory etiology. They occur much more frequently in children, and often in such cases disappear spontaneously when the subject has nearly or quite reached maturity still it is not a rare occurrence to find them in young adults or even in those who have reached middle age.

The diagnosis is easy, indeed by exclusion, the nature of the growth and character can always be reached. Digital examination is the surest means in all cases, but particularly so in children where posterior rhinoscopy is often impossible. The finger finds a mass in the superior pharynx that is yielding and gelatinous, with a furrowed surface that imparts somewhat of a wormy feeling, except in older subjects where the growth has undergone fibrous changes when the finger detects considerable hardness.

Posterior rhinoscopic examinations will often reveal the condition in this post-palate space perfectly, but it can rarely be successfully used with young children. Anterior rhinoscopy will occasionally reveal the growth, but as a rule the turges—ace of the turbinates which exists as one of the many sequelæ, will obstruct the view through the nose. The diagnosis is, however, usually so easy when we consider the age of the patient, the deafness, the open mouth, the vacant expression of the face, the retarded chest development, the small alæ, the inability to blow the nose, together with the history of snoring or difficult sleep-breathing

that a farther examination, by touch or vision, is necessary only to confirm an opinion already formed, and to discover the extent, the situation of the vegetations and the probable sequelæ. An examination by sight or touch may be necessary to exclude polypi, which are mostly confined to adults; or postnasal abscesses, not often seen in children; or bony growths, rarely found at this time of life; or foreign bodies such as buttons, beans, etc., thrust into the nostrils by young children. To glance at the child and hear his nasal tone is often sufficient to form a measurably sure diagnosis. On the other hand, it does not always follow that the child has adenoids, because he snores and keeps his mouth open, and is constantly enjoined by his mother to close the mouth and blow the nose, etc., as catarrhal tumefactions of the turbinates with enlarged tonsils may be the cause. In either case the treatment that succeeds in restoring an opening to the nature's normal breathing space -the nasal cavity-and thus enables its large mucous membrane surface, in an adult about thirty-six square inchesto perform its double functure of supplying moisture and warmth to the inspired air, will accomplish good results in many ways that are often-times unexpected.

Coincident and sequelæ symptoms may be revealed by physical examinations, such as lymphoid granulations of the pharynx and tonsils; a general catarrhal condition of all the nasal and throat mucous membranes; middle ear inflammations, either from direct pressure on the orifices of the Eustachian tubes or from extention of the inflammation by continuity to the middle ear. More or less deafness often results, whether it be due to the direct pressure of the growth on the orifices, or to the inflammatory extension through the tubes to the drum, and in some cases, though not often, when the result is a suppuration and bursting of the drum membrane.

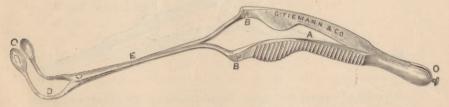
In the treatment of adenoid vegetations it has not seemed to me an absolute necessity to make a complete and thorough excision, although that end should always be accomplished if possible. A thorough removal is more to be desired in Eustachian tube and middle ear complications than when a nasal stenosis is the chief symptom. Atrophy of a small remaining portion of the mass will usually follow the operation that has decidedly interfered with its blood supply.

It was my first intention, to speak only of the treatment of adenoids and describe the new instruments made for me by the Tiemanns, of New York, for their excision, but at the request of the President I have added what I have just read. The mechanism of these instruments, which I shall presently discribe has rarely, if ever, been applied before to surgical instruments.

Lenox Brown advocates the use of the finger nail, or the gouge-shaped thimble. In using either, there is danger of detached pieces falling into the larynx as the pressure of the fingers upon the root of the tongue prevents the reflex resistence that would otherwise guard against such an accident. Gottstein's large ring curette is popular with many, especially in England and Germany. Griffin's malleable shank currette which is much smaller than Gottstein's is more popular in this country, and I think justly so. Bosworth's rigid shank is perferable but not so generally adaptable, nor is it so safe in the hands of a novice. Meyer, who has the honor of first describing adenoid vegetations and how to excise them, uses a ring shaped knife through the anterior nares, which means is resorted to now by some operators. Justi and Hartmann have each their own particular side-to-side curettes which they apply through the mouth. Voltolini was, for a long time, partial to electric wire loop inserted beneath the palate; a very effective means but one involving considerable trouble and not now much used. Blake's operation through the anterior nares with the cold wire has recently been extolled by Chiari, of Vienna, who has used it to his own satisfaction in over two hundred cases. I have used Blake's method in about sixteen to twenty cases with some—even much—satisfaction as to the results, but have always chosen the cases suitable for its use. In no case have I ever tried it in a child with small nares, nor indeed on any subjects where I could not see the mass through the nares with a strong electric light. Gibbon's adenotome—a guillotine in principle—would possibly not prove as successful in other than its author's hands. Loenberg and Michael prefer forceps with bullet shaped jaws. Guillian's, is somewhat simular to the preceding forceps, except it has horizontal cartrige-shaped jaws. Gleitzman's forceps, and also Elsburgs, have been more popular in Germany, France and England than in this country. The Hodge forceps one of the few with fenestræ has not proven popular on account of the length of its blades, straightness of its handle, and smallness of the fenestræ, together with its narrow uvula space.

I will not attempt to mention the many other valuable instruments that have been used in this operation. Notwithstanding their large number and variety, it would seem that no one instrument has yet gained any decided preponderance of favor.

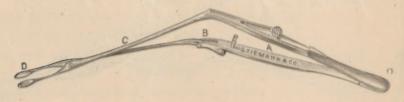
The very nature of these cases, affording as they do, so many ways of being reached, and giving such brilliant results when successfully removed, is calculated to develop an individuality in the practiced operator. May I use this reason as my excuse for describing the two instruments below?



The adenoid forceps as illustrated has a hinge and spring mechanism (B. B. & O.) not generally applied to surgical instruments. The obtuse angle at (BB) removes the hand below the line of vision when grasping the handle, and the space at

(D) allows the uvula to drop through and save it from contusion. The blades at (C) (drawn too small in the illustration) have olive shaped edges, not sharp but sufficiently acute to pass through adenoid tissue. The object of the fenestræ in the cupped jaws is to allow the soft tissues to be squeezed through and admit of a complete approximation of their edges. This obviates a tearing downward pull, and hence a dislodgment of the instrument. With this advantage, several grasps at the growth may be made at one sitting, perhaps as many as may be necessary for the removal of the whole mass. The blades are so shaped that they will only grasp redundant and protruding tissue, hence the comparative safety of the instrument, even in the hands of a novice, or in other hands when used without sight. The instrument may easily be inverted and used as inferior pharyngeal forceps, and on account of the short curve at (D) it is often better adapted to larvngeal purposes than the commonly used alligator forceps (Mackenzie's) with its long curve. The makers will reverse the angle of the handle, when desired, for this purpose, or vary the form and shape of the blades from their model as illustrated.

By a few turns of the screw at (O) the blades can be detached in order to render them aseptic. The instrument is beautifully made by the Tiemanns, of New York, 107 Park Row.



The small nasal or naso-adenoid forceps as illustrated, was designed to take many of the places now occupied by the Alligators, by supplying from eight to twelve times the power, and at the same time occupying no more space for small cavity operations. The mechanism (O B) consists of a spring handle,

the upper part of which is rigidly joined to the upper shaft at an angle of forty-five degrees, while the lower part moves by a pivot through a curved slot in the lower shaft at their junction. The adaptation of this principle to surgical instruments is as new as was the alligator principle not many years ago. The jaws at (D) admit of even a greater variety of shapes, and indeed the many times greater strength of this instrument, while its size is no larger, inspires a confidence in the operator that he could not feel while using the weaker alligator instrument. The downward turn of the handle (O to B) removes the hand from the line of vision, and the thumb catch at (A) holds the jaws (D) firmly together without the fear of breaking or even of springing. The shank is made long enough to reach adenoid tissue through the anterior nares when desired. The instrument may be used as a needle holder when properly groved; its jaws may be made with teeth for tearing; with sharp oval edges for cutting; vulsellum formed for using as tentacles; scissors shaped for clipping; with wedge and fenestra (Rougeur) for nipping; duck-billed for seizing; or indeed the jaws may be shaped to serve almost any conceivable purpose.

While the instrument is modeled by the Tiemann's, of New York, in the shape illustrated, this House will furnish it with jaws in any form, and still retain its strong and characteristic mechanism.

[For want of space the proper heading for the department to which this paper belongs could not be inserted.—Editor.]

